BRUHAT BANGALORE MAHANAGARA PALIKE

Name of the Work : Improvements to Roads,drains,footpath and park in ward no.08,Bytarayanapura Division (Package includes 11 Works of Rs 1010 lakhs)

BYATARAYANAPURA DIVISION

4th PART BILL

TEST REPORTS

TEJUS CONSULTANTS
CONSULTING ENGINEERS AND DESIGNERS
No.58 MIG, 6th Cross, 3rd Main
1st Stage, Basaveshwaranagar
Bangalore-560079
☎ 080 - 23287532
email: tejusconsultants@gmail.com

TEJUS
CONSULTANTS

TEST REPORT

Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	Bruhat Bangalore Mahanagara Palike
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises
Total Weight in g	3000

SIEVE ANALYSIS

Type of Material	40 mm down size	**Proposed Use**	PCC
Sample Location	At Site	**Date of Sampling**	5/3/2018
		Date of Testing	5/3/2018

IS Sieve Size	Weight Retained in gm	Cum. Weight Retained in gm	Cumulative Weight Retained in %	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA-2007) % of Passing For Graded Aggregate of Nominal Size
80.00mm	0	0	0.00	100.00	100
63.00mm	0	0	0.00	100.00	-
40.00mm	95	95	3.17	96.83	95-100
20.00mm	1342	1437	47.90	52.10	30-70
10.00mm	620	2057	68.57	31.43	10-35
4.75mm	815	2872	95.73	4.27	0-5
Pan	128	3000	100.00	0.00	

Remarks : Satisfactory / Not Satisfactory

Consultant's Representative

For KARTHIK ENTERPRISES

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT

Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	Bruhat Bangalore Mahanagara Palike
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SIEVE ANALYSIS

Total Weight:	**3000** gms				
Type of Material	**Fine aggregate (River Sand/M sand)**		**Proposed Use**	Concrete	
Sample Location	At Plant/site		**Date of Sampling**	5/3/2018	
			Date of Testing	5/3/2018	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing (Zone-II)**
10.00 mm	0	0	0	100.00	**100**
4.75 mm	229	229	7.63	92.37	**90 - 100**
2.36 mm	285	514	17.13	82.87	**75 - 100**
1.18 mm	520	1034	34.47	65.53	**55 - 90**
0.600 mm	480	1514	50.47	49.53	**35 -59**
0.300 mm	785	2299	76.63	23.37	**8-30**
0.150 mm	578	2877	95.90	4.10	**0 - 10**
Pan	123	3000			**-**

Remarks : Satisfactory / Not Satisfactory

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SPECIFIC GRAVITY AND WATER ABSORPTION
FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	Proposed Use	Concrete
Location/Source	At Plant/site	Date of Sampling	5/3/2018
Period of Soaking	24 hours	Date of Testing	5/3/2018

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	685	672	664	
B	Weight of oven - dry sample gm.	677	664	656	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1698	1698	1693	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.584	2.667	2.667	**2.639**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.182	1.205	1.220	**1.202**

For KARTHIK ENTERPRISES

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Sample ID	Cement
Date of Sample Tested	05/03/18
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	42 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	380 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

For KARTHIK ENTERPRISES

Authorised Signatory

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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NABL ACCREDITED AS PER ISO/IEC 17025:2005

ob No.: CECTC/BBMP/QC/2017-18

Date: 05.03.2018

TEST RESULTS OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

lient : **Bruhat Bangalore Mahanagar Palike**

lame of Work : Improvements to Roads,Drains,Footpath and Park in ward no.08,Bytarayanapura Division (Package includes 11 Works of Rs 1010 lakhs)

ontractor : **M/s Karthik Enterprises**

mple Identification : 8mm, 10mm TMT Bars

echnical Reference : IS 1786:2008, IS 1608:2005, IS 1599:1985 (Reaffirmed 2006)

ate of test : 05.03.2018

S.No	Brand	Nominal size (dia in mm)	Mass per metre (kg/metre)	TENSILE STRENGTH		
				0.20 % proof stress/ yield stress ($N/mm^{2)}$	Tensile strength ($N/mm^{2)}$	Elongation, percent on gauge length
1	Fe 500	8	0.396	510	553	17
2	Fe 500	10	0.617	535	576	18
3	Fe 500	12	0.889	553	590	19
4	Fe 500	16	1.560	569	612	20

lote:

. The report shall not be reproduced, except in full, without the written approval of the laboratory.
. The results indicated above are based on the tests carried out on the samples received in the laboratory.
. Any Query regarding the report must be reported within 15 days from the date of testing.

For KARTHIK ENTERPRISES

Authorised Signatory

For Civil Experts

Authorised Signature

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.
Bangalore

174, Sri Ranga Complex, Amrutha Nagar Main Road, New Bank Colony, Konanakunte, Bangalore - 560 062.
Mobile : +91 97429 59595 | Tel/Fax : 080 2632 2565 | Email : civilexpertsltd@gmail.com | URL : www.civilexperts.co.in

TEJUS
CONSULTANTS

TEST REPORT					
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.				
Clients	Bruhat Bangalore Mahanagara Palike				
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore				
Contractor	M/s Karthik Enterprises				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	20 mm down size		**Proposed Use**	Concrete	
Sample Location	At Plant		**Date of Sampling**	7/3/2018	
			Date of Testing	7/3/2018	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
40.00 mm	0	0	0	100	**100**
20.00 mm	265	265	2.65	97.35	**95 - 100**
10.00 mm	4689	4954	49.54	50.46	**25 - 55**
4.75 mm	4532	9486	94.86	5.14	**0 - 10**
Pan	514	10000			
Remarks :	Satisfactory / Not Satisfactory				

Consultant's Representative

TEJUS CONSULTANTS

For KARTHIK ENTERPRISES

Authorised Signatory

W08

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	M/s Karthik Enterprises	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size		Proposed Use		
Sample Location	Plant		Date of Sampling	7/3/2018	
			Date of Testing	7/3/2018	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	562	562	5.62	94.38	90-100
10.0	3568	4130	41.30	58.70	40-85
4.75	5478	9608	96.08	3.92	0-10
Pan	392	10000			

Remarks :	Satisfactory / Not Satisfactory

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SPECIFIC GRAVITY AND WATER ABSORPTION
FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	Proposed Use	Concrete
Location/Source	At Plant/site	Date of Sampling	7/3/2018
Period of Soaking	24 hours	Date of Testing	7/3/2018

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	645	655	675	
B	Weight of oven - dry sample gm.	637	647	667	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1673	1688	1698	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.579	2.674	2.647	**2.633**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.256	1.236	1.199	**1.231**

For KARTHIK ENTERPRISES

Authorised Signatory

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	Bruhat Bangalore Mahanagara Palike
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SIEVE ANALYSIS

Total Weight:	3000 gms				
Type of Material	**Fine aggregate (River Sand/M sand)**		**Proposed Use**	Concrete	
Sample Location	At Plant/site		**Date of Sampling**	7/3/2018	
			Date of Testing	7/3/2018	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing (Zone-II)**
10.00 mm	0	0	0	100.00	**100**
4.75 mm	240	240	8.00	92.00	**90 - 100**
2.36 mm	274	514	17.13	82.87	**75 - 100**
1.18 mm	415	929	30.97	69.03	**55 - 90**
0.600 mm	477	1406	46.87	53.13	**35 -59**
0.300 mm	744	2150	71.67	28.33	**8-30**
0.150 mm	582	2732	91.07	8.93	**0 - 10**
Pan	268	3000			**-**

Remarks : Satisfactory / Not Satisfactory

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT

Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Sample ID	Cement
Date of Sample Tested	07/03/18
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	45 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	395 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

For KARTHIK ENTERPRISES

Authorised Signatory

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	Bruhat Bangalore Mahanagara Palike
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises
Total Weight in gm:	3000

SIEVE ANALYSIS

Type of Material	40 mm down size			**Proposed Use**	PCC
Sample Location	At Site			**Date of Sampling**	14/03/18
				Date of Testing	14/03/18
IS Sieve Size	**Weight Retained in gm**	**Cum. Weight Retained in gm**	**Cumulative Weight Retained in %**	**Cumulative Weight Passing in %**	**Specific Limits as per IS 383-1970 (RA-2007)** **% of Passing For Graded Aggregate of Nominal Size**
80.00mm	0	0	0.00	100.00	100
63.00mm	0	0	0.00	100.00	-
40.00mm	92	92	3.07	96.93	95-100
20.00mm	1356	1448	48.27	51.73	30-70
10.00mm	610	2058	68.60	31.40	10-35
4.75mm	820	2878	95.93	4.07	0-5
Pan	122	3000	100.00	0.00	
Remarks :	Satisfactory / Not Satisfactory				

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Sample ID	Cement
Date of Sample Tested	14/03/18
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	38 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	382 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

For KARTHIK ENTERPRISES

Authorised Signatory

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	Proposed Use	Concrete
Location/Source	At Plant/site	Date of Sampling	14/03/18
Period of Soaking	24 hours	Date of Testing	14/03/18

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	682	675	670	
B	Weight of oven - dry sample gm.	674	667	662	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1698	1698	1695	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.602	2.647	2.648	**2.632**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.187	1.199	1.208	**1.198**

For KARTHIK ENTERPRISES

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT

Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	Bruhat Bangalore Mahanagara Palike
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SIEVE ANALYSIS

Total Weight:	3000 gms				
Type of Material	**Fine aggregate (River Sand/M sand)**		**Proposed Use**	Concrete	
Sample Location	At Plant/site		**Date of Sampling**	14/03/18	
			Date of Testing	14/03/18	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing (Zone-II)**
10.00 mm	0	0	0	100.00	**100**
4.75 mm	224	224	7.47	92.53	**90 - 100**
2.36 mm	275	499	16.63	83.37	**75 - 100**
1.18 mm	510	1009	33.63	66.37	**55 - 90**
0.600 mm	485	1494	49.80	50.20	**35 -59**
0.300 mm	780	2274	75.80	24.20	**8-30**
0.150 mm	580	2854	95.13	4.87	**0 - 10**
Pan	146	3000			**-**
Remarks :	Satisfactory / Not Satisfactory				

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

Test Report on Compressive Strength of Concrete Cubes

Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	08/03/18	15/03/18	7 days	8.822	22500	297	13.20	13.29
2	08/03/18	15/03/18	7 days	8.865	22500	301	13.38	
3	08/03/18	15/03/18	7 days	8.722	22500	299	13.29	

For KARTHIK ENTERPRISES

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT					
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.				
Clients	Bruhat Bangalore Mahanagara Palike				
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore				
Contractor	M/s Karthik Enterprises				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	20 mm down size		**Proposed Use**	Concrete	
Sample Location	At Plant		**Date of Sampling**	17/03/18	
			Date of Testing	17/03/18	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
40.00 mm	0	0	0	100	**100**
20.00 mm	270	270	2.70	97.30	**95 - 100**
10.00 mm	4587	4857	48.57	51.43	**25 - 55**
4.75 mm	4352	9209	92.09	7.91	**0 - 10**
Pan	791	10000			
Remarks :	Satisfactory / Not Satisfactory				

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT

Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	Bruhat Bangalore Mahanagara Palike
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises
Total Weight:	10000 gms

SIEVE ANALYSIS

Type of Material	**12.5 mm down size**		**Proposed Use**		
Sample Location	Plant		**Date of Sampling**	17/03/18	
			Date of	17/03/18	
IS Sieve Size (in mm)	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
20.0	0	0	0	100	**100**
12.5	568	568	5.68	94.32	**90-100**
10.0	3365	3933	39.33	60.67	**40-85**
4.75	5587	9520	95.20	4.80	**0-10**
Pan	480	10000			

Remarks : Satisfactory / ~~Not Satisfactory~~

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SPECIFIC GRAVITY AND WATER ABSORPTION
FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	Proposed Use	Concrete
Location/Source	At Plant/site	Date of Sampling	17/03/18
Period of Soaking	24 hours	Date of Testing	17/03/18

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	670	680	685	
B	Weight of oven - dry sample gm.	662	671	677	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1693	1700	1700	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.627	2.631	2.604	**2.621**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.208	1.341	1.182	**1.244**

For KARTHIK ENTERPRISES

Authorised Signatory

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Clients	Bruhat Bangalore Mahanagara Palike
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SIEVE ANALYSIS

Total Weight:	**3000** gms				
Type of Material	**Fine aggregate (River Sand/M sand)**		**Proposed Use**	Concrete	
Sample Location	At Plant/site		**Date of Sampling**	17/03/18	
			Date of Testing	17/03/18	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing (Zone-II)**
10.00 mm	0	0	0	100.00	**100**
4.75 mm	230	230	7.67	92.33	**90 - 100**
2.36 mm	270	500	16.67	83.33	**75 - 100**
1.18 mm	515	1015	33.83	66.17	**55 - 90**
0.600 mm	535	1550	51.67	48.33	**35 -59**
0.300 mm	650	2200	73.33	26.67	**8-30**
0.150 mm	550	2750	91.67	8.33	**0 - 10**
Pan	250	3000			**-**
Remarks :	Satisfactory / Not Satisfactory				

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT	
Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Sample ID	Cement
Date of Sample Tested	17/03/18
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	38 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	382 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	4mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

For KARTHIK ENTERPRISES

Authorised Signatory

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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CONSULTANTS

PRECAST SLAB (CORE) TEST REPORT

ame of Work	:	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
ient	:	Bruhat Bangalore Mahanagara Palike
ntractor	:	M/s Karthik Enterprises
.of Sample Tested	:	3
te of Testing	:	23/03/18
chinical Reference	:	IS:516-1959 (Reaffirmed 1999), SP-24:1983.
ade of Concrete	:	M_{20} . 250mm Thick

No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	100.00	180.00	3.520	2489.89	1.80	0.960	158.68	20.20	21.82	20.95	26.18
2	100.00	180.00	3.534	2499.79	1.80	0.960	158.47	20.18	21.79	20.92	26.15
3	100.00	180.00	3.548	2509.70	1.80	0.960	158.29	20.15	21.77	20.90	26.12

te:

The report shall not be reproduced, except in full, without the written approval of the laboratory.

The results indicated above are based on the tests carried out on the samples received in the laboratory.

Any Query regarding the report must be reported reported within 15 days from the date of testing.

For KARTHIK ENTERPRISES

Authorised Signatory

Consultant's Representative

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

Test Report on Compressive Strength of Concrete Cubes

Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

7th day

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	19/03/18	26/03/18	7 days	8.822	22500	297	13.20	13.29
2	19/03/18	26/03/18	7 days	8.865	22500	301	13.38	
3	19/03/18	26/03/18	7 days	8.722	22500	299	13.29	

For KARTHIK ENTERPRISES

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Test Report on Compressive Strength of Concrete Cubes

Project	Improvements to Road,Drain and Footpath in Kodigehalli Main Road and Abutting Cross Roads in Ward No.8, Kodigehalli.
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

28 Days

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	08/03/18	05/04/18	28 days	8.582	22500	452	20.09	20.16
2	08/03/18	05/04/18	28 days	8.762	22500	454	20.18	
3	08/03/18	05/04/18	28 days	8.560	22500	455	20.22	

For KARTHIK ENTERPRISES

Authorised Signatory

15.05

Assistant Executive Engineer,
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Yelahanka Zone, B.B.M.P.,
Bangalore.